

CLAIMS

1. A remote station apparatus comprising:
 - 2 a quality measurement unit for iteratively measuring link quality of a communication link; and
 - 4 a differential analyzer for determining changes in the measured link quality.
2. The remote station of claim 1, wherein the link quality is measured as carrier to interference of a received signal.
3. The remote station of claim 2, wherein the quality measurement unit generates a quality metric, and wherein the remote station applies a sector cover to the quality metric.
4. In a wireless communication system, a method comprising:
 - 2 generating quality messages at a first frequency, the quality message providing information on the quality of a communication link; and
 - 4 generating differential indicators at a second frequency, the differential indicators indicating changes in the quality of the communication link, wherein the second frequency is greater
 - 6 than the first frequency.
 - 8
5. The method of claim 4, wherein each quality message includes carrier to interference information of a received signal at a receiver
6. The method of claim 5, wherein the received signal is a pilot signal.
7. The method of claim 4, wherein each differential indicator is at least one
- 2 bit.

8. The method of claim 4, wherein generating differential indicators further
2 comprises:

4 comparing a current link quality measurement to a projected link
quality measurement;

6 decrementing the differential indicator when the current link quality
measurement is less than the projected link quality
measurement;

8 incrementing the differential indicator when the current link quality
measurement is greater than or equal to the projected link
10 quality measurement; and

transmitting the differential indicator.

9. In a wireless communication system for processing voice
2 communications and packet-switched communications, a base station
comprising:

4 receive circuitry operative to receive signals on a reverse link,
including a quality message and differential indicators, the
6 quality message periodically providing a quality metric of a
forward link, wherein the differential indicators track the quality
8 metric between successive quality messages;

10 a memory storage unit operative to store a quality message
received on the reverse link; and

12 a differential analyzer to update the quality message stored in the
memory storage unit in response to the differential indicators.

10. The base station of claim 9, further comprising:

2 a scheduler unit operative to schedule packet-switched
communications in the system in response to the quality
4 message stored in the memory storage unit.

11. The base station of claim 10, wherein the quality metric is a data rate
2 control message.

12. The base station of claim 11, wherein:
2 each data rate control message corresponds to an entry in a data
rate control table; and
4 each differential indicator points to a neighboring entry in the data
rate control table.

13. In a wireless communication system for processing voice
2 communications and packet-switched communications, a transceiver
comprising:

4 a data rate control table listing data rate control messages and
associated transmission information;

6 a data rate calculation unit coupled to the data rate control table, the
data rate calculation unit operative to select a data rate control
8 message in response to a received signal at the transceiver;
and

10 a differential analyzer coupled to the data rate calculation unit
operative to generate differential indicators pointing to a next
12 entry in the data rate control table.